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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/318,073 05/25/99 ZHU

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GREGORY A BURNS  
HONEYWELL INC  
HONEYWELL PLAZA MN12-8251  
P O BOX 524  
MINNEAPOLIS MN 55440-0524

EXAMINER

ANDLIAR, L

ART UNIT

PAPER NUMBER

2826

DATE MAILED:

01/31/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/318,073

Applicant(s)

ZHU ET AL.

Examiner

Leonardo Andujar

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 06 November 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 23-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5, 6 and 9-22 is/are rejected.
- 7) ☒ Claim(s) 2, 3, 7 and 8 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 May 1999 is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 and 6.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

## DETAILED ACTION

### *Election/Restriction*

1. In response to the restriction requirement mailed on 10-3-00, Applicant has elected with traverse to prosecute the claims of Group I (claims 1-22). Applicant argues that the restriction requirement is incorrect because the Examiner has not shown that all of the claims of Group II are distinct from the claims of Group I. Specifically, claims 23-39 do not require the language concerning forming a trench in an insulating layer. While this is true, claims 23-29 require that the device be "formed on a common substrate". The device of claims 1-22 could be produced by forming the device on a composite substrate or on separate substrates. It is clear that the inventions of Group I and II are independent and/or distinct for the reasons given above and in the previous Office Action. Therefore the restriction requirement is made **FINAL**.

### *Drawings*

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "magnetic field sensitive region" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

### *Specification*

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Thin Film Memory Device Having Local and External Magnetic Shielding.

***Claim Rejections - 35 USC § 112***

4. Claims 5, 6 and 9-22 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5, lines 3 "said magnetic field sensitive region" has no antecedent basis.

In claim 6, lines 3 "said magnetic field sensitive region" has no antecedent basis.

In claim 9 do not show clearly if the memory element is contained between the first and second magnetic material.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Schapira (3,623,032).

Schapira discloses a memory element comprising:

- a magnetic storage **10** having an upper surface and a lower surface;
- a first shielding having a soft magnetic material **18**, positioned above the upper surface of the magnetic storage **10**;

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- a second shielding means having a soft magnetic material **18**, positioned below the lower surface of the magnetic storage **10**.

### ***Allowable Subject Matter***

6. Claims 2-4, 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kobayashi et al. (3,623,035) discloses structures and procedures similar to the instant invention.

*Papers related to this application may be submitted directly to Art Unit 2826 by facsimile transmission. Papers should be faxed to Art Unit 2826 via the Art Unit 2826 Fax Center located in Crystal Plaza 4, room 4C23. The faxing of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (15 November 1989). The Art Unit 2826 Fax Center number is **(703) 308-7722** or **-7724**. The Art Unit 2826 Fax Center is to be used only for papers related to Art Unit 2814 applications.*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Leonardo Andujar** at **(703) 308-0080** and between the hours of 9:00 AM to 5:00 PM (Eastern Standard Time) Monday through Friday or by e-mail via [Leonardo.Andujar@uspto.gov](mailto:Leonardo.Andujar@uspto.gov). If attempts to reach the examiner by telephone

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are unsuccessful, the examiner's supervisor, Nathan Flynn, can be reached on (703) 308-6601.

Any inquiry of a general nature or relating to the status of this application should be directed to the **Group 2800 Receptionist** at **(703)305-3900**

The following list is the Examiner's field of search for the present Office Action:

Field of Search	Date
U.S. Class / Subclass(es): 257/295, 365/158, 162, 172 and 173	01/2001
Other Documentation:	
Electronic Database(s): East (USPAT)	01/2001

**Leonardo Andujar**  
Patent Examiner Art Unit 2826

LA  
01/26/2001



Nathan Flynn  
Primary Examiner